

AMENDMENTS TO THE CLAIMS

The below listing of claims replaces all prior versions of claims in the application.

Listing of Claims:

1. (Currently Amended) A drive apparatus for a brushless motor, the brushless motor including a rotor having opposite magnetic poles arranged on a periphery of the rotor, and a stator facing the rotor and having at least three interconnected coils at equal angular intervals, the drive apparatus comprising:

a memory meansunit for storing drive data which represent drive currents to be supplied to the respective coils at each of predetermined angular positions of the rotor;

a control meansunit for reading those drive data which best match a target angular position of the rotor, from the memory meansunit, and for generating drive signals based on the read drive data; and

a drive circuit for supplying the drive currents to the respective coils, based on the generated drive signals; and

a detector for detecting a current angular position of the rotor, and

wherein, when a difference between the current angular position of the rotor and the target angular position is greater than a predetermined value, the control unit does not read the drive data from the memory unit, and instead selects two of the three coils based on the angular position difference and supplies signals to the drive circuit so as to supply appropriate currents to

the selected two coils, until the angular position difference is not greater than the predetermined value.

2. (Cancelled)

3. (Currently Amended) The drive apparatus according to claim 21, wherein the predetermined value is 60 degrees.

4. (Original) The drive apparatus according to claim 1, wherein the brushless motor controls movement of an electronic throttle valve of an engine.

5. (Original) The drive apparatus according to claim 4, wherein the target angular position of the rotor is determined by a position of an accelerator pedal.

6. (Original) The drive apparatus according to claim 1, wherein the drive circuit includes a plurality of field-effect transistors.

7. (Currently Amended) The drive apparatus according to claim 21, wherein the detector includes at least one Hall element.

8. (Original) The drive apparatus according to claim 1, wherein the at least three interconnected coils are $3 \times n$ coils (n is a natural number).

9. (Currently Amended) A method for driving a brushless motor, the brushless motor including a rotor having opposite magnetic poles arranged on a periphery of the rotor, and a stator facing the rotor and having at least three interconnected coils at equal-angular intervals, the method comprising:

storing, in a memory, drive data which represent drive currents to be supplied to the respective coils at each of predetermined angular positions of the rotor;

reading those drive data which best match a target angular position of the rotor, from the memory;

generating drive signals based on the read drive data; and
supplying the drive currents to the respective coils based on the generated drive signals,
respectively, and

detecting a current angular position of the rotor, and
wherein when a difference between the current angular position of the rotor and the target
angular position is greater than a predetermined value, the method further comprises selecting
two of the three coils based on the angular position difference and supplying appropriate currents
to the selected two coils, until the angular position difference is not greater than the
predetermined value, prior to reading the drive data from the memory.

10. (Cancelled)

11. (Currently Amended) The method according to claim 109, wherein the predetermined value is 60 degrees.

12. (Original) The method according to claim 9, wherein the brushless motor controls movement of an electronic throttle valve of an engine.

13. (Original) The method according to claim 12, wherein the target angular position of the rotor is determined by a position of an accelerator pedal.

14. (Original) The method according to claim 9, wherein the at least three interconnected coils are $3 \times n$ coils (n is a natural number).

15. – 20. (Cancelled)